Amendments to the Specification

Please amend the paragraph that bridges page 1 to page 2, from page 1, line 24 to page 2, line 13, as follows:

--Genomics analysis involves the analysis of sequence information (DNA, RNA or protein) typically generated from genome sequencing projects. Typically biomolecules immobilised for this purpose are referred to as microarrays. An array is a two-dimensional sheet to which is applied different biomolecules at different sites on the sheet. This facilitates the screening of the biomolecules in parallel and on a much smaller scale than conventional solid phase assays. Typically biomolecules are immobilized by chemical coupling or adsorption. Currently arrays of biomolecules are made by depositing aliquots of sample under conditions which allow the molecules to bind or be bound to the array surface. Alternatively, or in addition, biomolecules maybe synthesised at the array surface and directly or indirectly immobilised. The number of different samples that are applied to a single array can reach thousands. The application of samples to form an array can be facilitated by the use of "array printers", (for example see Gene Expression Micro-Arrays, A New Tool for Genomics, Shalon, D, in Functional Genomics, IBC library series; Southern EM, DNA Chips: Analysing Sequence by Hybridisation to Oligonucleotides on a Large Scale, Trends in Genetics, 12: 110-5, 1996). The analysis of micro-arrays is undertaken by commercially available "array readers" which are used to interpolate the data generated from the array, for example as disclosed in ~~US5, 545, 531~~ US 5,545,531. Arrays are typically made individually and used only once before being disposed of. Therefore, it is highly desirable to produce assays which are manufactured to a high degree of reproducibility and with minimum error.--

Please amend the second paragraph that appears on page 9, lines 7-10 as follows:

-- Preferably the compound is an alkene (e.g. ~~eg~~ containing up to 20 carbon atoms and more usually up to 12 carbon atoms, e.g. ~~eg~~ 8), a carboxylic acid (especially α,β – unsaturated carboxylic acid); an alcohol (especially an unsaturated alcohol); or an amine (especially an unsaturated amine). --

Please amend the fifth paragraph that appears on page 9, lines 15-18 as follows:

-- Preferably the compounds are selected from the group consisting of: an alkene (e.g. ~~eg~~ containing up to 20 carbon atoms and more usually up to 12 carbon atoms, e.g. ~~eg~~ 8), a carboxylic acid (especially α,β – unsaturated carboxylic acid); an alcohol (especially an unsaturated alcohol); or an amine (especially an unsaturated amine). --

Please amend the sixth paragraph that appears on page 9, lines 20-22 as follows:

-- "Alkene" refers to linear and branched alkenes, of which linear are preferred, containing one or more than one C=C double bond e.g. ~~eg~~ an octadiene such as octa-1,7-diene. Dienes form a preferred class of alkenes. --

Please amend the last paragraph that appears on page 9, lines 28-30 as follows:

-- Alternatively said polymer is a co-polymer. Preferably said co-polymer comprises at least one organic monomer with at least one hydrocarbon. Preferably said hydrocarbon is an alkene, e.g. ~~eg~~ a diene such as, for example octa 1,7-diene. --

Please amend the last paragraph that appears on page 21, lines 18-32 as follows:

-- Acrylic acid and octa-1,7-diene monomers were obtained from Aldrich (UK) and used as received save for several freeze-pump-thaw cycles to remove dissolved gases prior to use.

Initially, a homogenous layer of octadiene plasma polymer was deposited onto a single 13mm glass coverslip using a flow rate of $24cm^3_{stp}min^{-1}$ and 10W continuous wave power to provide a hydrophobic background surface upon which to write a hydrophilic (carboxylic acid) chemistry. The octadiene coated glass coverslip was placed on the XYZ manipulator and the system was pumped down to the reactor base pressure ($<10^{-3}$mbar). A 100 micron writing element was placed between the excitation chamber and the sample surface. A flow rate of acrylic acid of $4cm^3_{stp}min^{-1}$ was set using a fine control needle valve (this gives a reactor pressure of $2.2x10^{-2}$mbar). A plasma was then excited at a pressure of ~~1.8x10-2~~ $1.8x10^{-2}$ mbar and continuous wave power of 5W for a period of 2 minutes, during which time the writing element was translated across the surface first in the X-direction (at 0.5mm/min) for 1 min, then in the Y-direction (at 0.5mm/min) for 1 min. --